

REMARKS

In accordance with the foregoing, claims 12 and 42 have been amended and claim 32 has been cancelled without prejudice or disclaimer. No new matter has been introduced by these amendments. Therefore, claims 12, 15, 28, 31 and 33-42 are pending and reconsideration and allowance of the claims are respectfully requested.

Interview with the Examiner

Applicants wish to thank the Examiner for taking the time to discuss the outstanding Office Action with the Applicant's representative during the telephone interview conducted on September 16, 2008.

Support for the Amendments to the Claims

Applicants note that the Amendments to the claims find support throughout the as-filed specification. For example, the recitation of "said number of loudspeaker output channels [being] lower than N" is supported by FIG. 3b, which is an illustration of an embodiment in which the number of output channels P is less than the number of directional components N. Also, at page 10, lines 20-21, the specification states that "M should be significantly higher than N," where, in this case, M refers to the number of the directional components and N refers to the number of output channels, as claimed.

Claim Rejections under 35 U.S.C. §102

Claims 12, 15, 31 and 34-42 stand rejected under 35 U.S.C. §102(e) as being anticipated by Moorer, U.S. Patent No. 6,072,878 (hereinafter referred to as "Moorer"). These rejections are overcome.

Regarding the rejections of claims 12 and 42, it is noted that these claims now recite "rendering the sum-signal into a number of loudspeaker output channels and wherein said number of loudspeaker output channels is lower than N." This feature is not disclosed in the reference to Moorer.

By way of review, Moorer is directed to recording and mixing sound into 5 channels in accordance with parameters defining assumed speaker positions, re-matrixing the 5 channels into

5 other channels via 3 coefficient channels in accordance with parameters defining actual speaker angles, and recording directly into 3 coefficient channels by means of directional microphones. *See Moorer, at column 7, lines 5-27.*

Hence, Moorer incorporates knowledge about assumed or actual speaker positions. While this fact alone distinguishes the reference from the claimed invention, which does not consider any knowledge or assumptions about how sound is to be reproduced, this fact also provides evidence that, in Moorer, the number of (alleged) “directional components” cannot be and is never greater than the number of assumed speakers. As such, Moorer cannot and does not disclose the claimed rendering of the sum-signal into a number of loudspeaker output channels, wherein said number of loudspeaker output channels is lower than N.

In greater detail, as shown in FIGS. 3 and 4 in Moorer, 5 channels are established, in accordance with an assumed number of speakers that will be necessary for sound reproduction, and later re-matrixed into, again, 5 channels.

Further, applicants submit that Moorer actually teaches using less intermediate channels than assumed speakers. For example, FIGS. 4, 5, and 6 suggest the use of 3 coefficient channels and 5 loudspeaker channels. Also, Moorer specifically states that the number of loudspeakers is equal to or greater than $1+2n$, where n is the number of harmonic to be reproduced. As such, according to Moorer, the number of speakers is always more than twice the number of harmonics. At the very least, it is seen that Moorer does not suggest a possibility of a number of the loudspeaker output channels being less than the number of directional components, as claimed.

Thus, applicants respectfully assert that claims 12 and 42 are patentably distinguished from the reference to Moorer and that, therefore, the rejections of these claims are overcome.

Regarding the rejections of claims 15, 31 and 34-41, it is noted that these claims depend from claim 12 and that, therefore, the rejections of these claims are overcome for at least the reasons set forth above.

Claim Rejections under 35 U.S.C. §103

The Examiner has rejected claims 28 and 32-33 under 35 U.S.C. §103(a) as being unpatentable over Moorer. However, since claims 28 and 33 depend from claim 12, applicants

respectfully assert that the rejections of these claims are overcome for at least the reasons set forth above. Since claim 32 has been cancelled, the rejection of this claim is moot.

Conclusion

In view of the foregoing, it is respectfully submitted that the instant application is in condition for allowance. Accordingly, it is respectfully requested that this application be allowed and a Notice of Allowance issued. If the Examiner believes that a telephone conference with Applicants' attorneys would be advantageous to the disposition of this case, the Examiner is cordially requested to telephone the undersigned.

In the event the Commissioner of Patents and Trademarks deems additional fees to be due in connection with this application, Applicants' attorney hereby authorizes that such fee be charged to Deposit Account No. 06-1130.

Respectfully submitted,

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